# The Workforce Education and Development in Taiwan

### Lung-Sheng Lee

Professor, Department of Technology Application and Human Resource

Development, National Taiwan Normal University (NTNU); On secondment as

Executive Director, Higher Education Evaluation and Accreditation Council of

Taiwan (HEEACT)

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#### Abstract

Workforce education and development (WED) can be broadly defined as those formal, informal and nonformal activities that prepare people for work. In Taiwan, it includes technological and vocational education (TVE), human resource development (HRD), public vocational training and adult education. In order to promote information exchanges and further discussion, this paper, based on literature review, states the main workforce challenges which Taiwan faces and the major trends (i.e., new directions) in the TVE and HRD in Taiwan. Consequently, two workforce challenges which Taiwan faces are firstly identified as follows: (1) Productivity burden in Taiwan's workforce is increasing; and (2) Taiwan faces a quality workforce shortage. Then, the following three trends are identified: (1) TVE focuses on the link between student's learning and employment; (2) Human resource development (HRD) paradigm shifts to workplace learning and performance; and (3) Competency-based education and training (CBET) has been increasingly valued. It is suggested that WED serves as not only a lever, a simple machine, to address the workforce challenges but also a place for its educators/trainers to effectively help students/trainees leaverage their competencies for successful careers.

# The Workforce Education and Development in Taiwan Taiwan At Least Faces Two Workforce Challenges

Taiwan has a high population density but is confronted by at least the following two challenges regarding workforce quality and quantity:

1. Productivity burden in Taiwan's workforce is increasing

Taiwan's birth rate fell to the world's lowest (0.9 baby per woman) in 2010.

A dropping population might lead to lower productivity as well as aging workforce and making its economy less competitive (Jennings, 2011). In addition to promoting its fertility rate, encouraging the elderly, women and foreigners to work, and leaning toward a technology-intensive economy,

Taiwan demands skills-intensive workforce to increase its productivity. This causes the productivity burden in Taiwan's workforce to increase.

2. Taiwan faces a quality workforce shortage

Nunns (2012) pointed out that Taiwan is the largest foreign investor and employer in China and plays a critical role in paving China's road to becoming the world's second largest economy. In addition, preliminary findings revealed that a large scale departure of high-profile academics to Hong Kong was observed, as well as health care and medical professionals to Singapore (Gibbs, 2011). Taiwan's talents are also moving to other countries for more

lucrative employment and business endeavors, resulting in a brain drain and industry outflows in Taiwan.

In addition, Taiwan has too many universities and colleges (a total of 163 schools in the 2011 academic year), which can oversupply and undersupply its labor market at the same time. It is expected that the higher the educational level of people, the lower unemployment rate. Unfortunately, the unemployment rate for college graduates is 5.66%, 4.29% for high school graduates and 3.45% for those with only a junior high school background (Staff Reporter, 2012). Many college graduates are unable to find jobs, while strategic industries and small and medium enterprises (SMEs) are finding it increasingly difficult to recruit qualified personnel (Editorials, 2011).

### **WED Helps Taiwan Address Workforce Challenges**

WED has had a profound and positive impact on Taiwan. And It is needed to continue helping Taiwan address workforce challenges. The followings are its main trends.

TVE focuses on the link between student's learning and employment
 Beyond the nine years of compulsory education, Taiwan has the following
 two additional streams in the educational system: general academic education

 (GAE) and technological and vocational education (TVE). TVE has the

following two key features: (1) a complete system to ensure students' horizontal and vertical mobility; and (2) a main schooling stream, parallel to the GAE stream at upper secondary and post-secondary school levels. The three levels of TVE--vocational high school (VHS), junior college of technology (JCT), and university/college of technology (UT/CT)--aim to prepare students for technical or managerial posts at the basic, middle, or advanced level. TVE institutions enhance their students the following three categories of skills: academic, technical and employability. The third one is the capability of getting and keeping satisfactory work (University of Kent, n.d.).

It is believed that phase input decides the output mode and the output mode directs phase input. Leaning towards outcome-based, current TVE in Taiwan focuses on helping its students gain immediate employment and sustainable development. Graduate's employment rate is considered as the most important key performance indicator (KPI) for all TVE institutions. In order to increase the graduate's employment rate, some measures, such as workplace internship, cooperative education (co-op ed), co-teaching involving full-time teacher and part-time industrial practitioners, and education industry partnership, have been strengthened.

2. HRD paradigm shifts to workplace learning and performance

The paradigm of human resource development (HRD) has shifted to workplace learning and performance. Its sub-trends are identified as follows:

(1) Types of participants and facilitators are diversifying, (2) Emerging approach focus is practice-based systemic learning, (3) The flexibility of learning time has been increasing, (4) Learning by working and learning through systematic instruction at the workplace have been highly appraised, and (5) Workplace learning culture as well as practitioner's active engagement and motivation to learn have become key elements (Lee & Lai, 2012).

# 3. CBET Has Been Increasingly Valued

Competency can serve as a common language for aligning workforce recruitment, selection, preparation and assessment processes. Competency-based education and training (CBET) has been increasingly valued in the WED programs in Taiwan. For example, the equation,  $C = (K + S)^A$  (C: competitiveness/Competency, K: Knowledge, S: Skill, A: Attitude), is frequently mentioned. This equation indicates that attitude is so critical to workforce. For another example, to prepare  $\pi$ -shaped persons is widely suggested. It is argued that a person who is good at two areas, such as finance and information management, and his/her competencies for the two areas are so well- integrated to gain synergy. In Taiwan, more and more

competency models or categories have been developed and applied.

Competency-based national qualifications framework (NQF) also becomes a buzzword.

### Conclusion

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Archimedes used to say, "Give me a place to stand and with a lever I will move the earth." Viewed from the macro level, WED can serve as the lever, a simple machine, to address the workforce challenges. Viewed from the micro level, WED is highly expected to serve as the place for its educators/trainers to effectively help students/trainees leverage their competencies for successful careers.

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